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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/054,179

01/17/2002

William R. Wheeler

10559-607001/P12891

4487

7590

10/05/2004

FISH & RICHARDSON, PC
4350 LA JOLLA VILLAGE DRIVE
SAN DIEGO, CA 92122

EXAMINER

THOMPSON, ANNETTE M

ART UNIT

PAPER NUMBER

2825

DATE MAILED: 10/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/054,179

Applicant(s)

WHEELER ET AL.

Examiner

A. M. Thompson

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 January 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>06/11/2003: 03/15/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This application 10/054,179 has been examined. Claims 1-30 are pending.

Drawings

1. The drawings are objected to because Figures 1-4 have poor/illegible figure and line clarity. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claims 9 and 30 are objected to because of the following informalities: Pursuant to claim 9, the claim preamble should state the intended use or purpose of the

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invention. Pursuant to claim 30, this claim should depend from claim 29. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Rejection of claims 1-30

4. Claims 1-30 are rejected under 35 U.S.C. 102(b) as being anticipated by Watkins et al., U.S. Patent 5,220,512. Watkins discloses a system for simultaneous, interactive presentation of electronic circuit diagrams and simulation data.

5. Pursuant to claims 1, 9, 11, 19, 21, 29, Watkins discloses a method (c1, c9), article comprising a machine-readable medium (c11, c19), and apparatus (c21, c29) for modeling a logic design (Abstract, Figs. 1, 2; col. 8, ll. 10-48), comprising creating a graphical representation of the logic design (col. 5, ll. 26-44); generating simulation code based on the graphical representation (col. 5, ll. 26-44; col. 5, line 59 to col. 6, line 13).

6. Pursuant to claims 2, 12, and 22, wherein the graphical representation is comprised of functional block diagrams and virtual wires that interconnect the functional block diagrams (Fig. 3; col. 5, ll. 26-43).

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7. Pursuant to claims 3, 13, 23 wherein creating comprises retrieving the functional block diagrams from a database and arranging the functional block diagrams and the virtual wires to model the logic design (col. 5, ll. 45-58).

8. Pursuant to claims 4, 14, 24, wherein creating comprises defining the functional block diagrams and the virtual wires to model the logic design (col. 8, ll. 10-35).

9. Pursuant to claims 5, 15, 25, further comprising displaying a menu comprised of different types of functional block diagrams (col. 5, ll. 21-24); receiving an input selecting one of the different types of functional block diagrams; retrieving a selected functional block diagram; and creating the graphical representation of the logic design using the selected functional block diagram (col. 5, ll. 26-40).

10. Pursuant to claims 6, 16, 26 further comprising propagating a state through the simulation code (col. 5, ll. 1-13); and determining if there is an error in the logic design based on the propagated state (col. 6, ll. 2-35).

11. Pursuant to claims 7, 17, and 27, wherein the state comprises one of a zero, one and an undefined state (Fig. 4, state table).

12. Pursuant to claim 8, 18, and 28, further comprising providing a visual indication if there is an error in the graphical representation of the logic design (col. 6, ll. 2-6; col. 9, ll. 45-57).

13. Pursuant to claims 10, 20, and 30, further comprising generating simulation code to simulate the operation of the logic design; and testing the logic design by propagating one or more states through the simulation code (col. 6, ll. 6-35; col. 7, ll. 3-47).

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Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please reference the PTO-892 for a complete listing.

15. Any inquiry concerning this communication or earlier communications should be directed to Examiner A.M. Thompson whose telephone number is (571) 272-1909. The Examiner can usually be reached Monday thru Friday from 8:00 a.m. to 4:30 p.m..

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

16. Responses to this action should be mailed to the appropriate mail stop:

Mail Stop _____

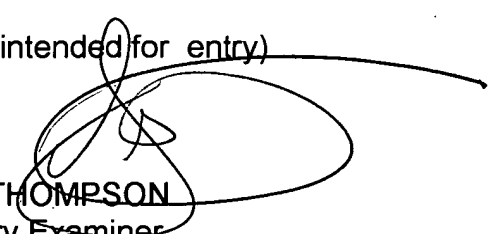
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P.O. Box 1450

Alexandria, VA 22313-1450

or faxed to:

(703) 872-9306, (for all **OFFICIAL** communications intended for entry)


A. M. THOMPSON
Primary Examiner
Technology Center 2800